Release A CDR RID Report

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Document Release A SDPS/CSMS Internal ICD (313-CD-004-001)

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Review Release A CDR
Originator Ref DSNO 3
Priority 1

Section Entire Document Content **Page** N/A

Figure Table N/A

Category Name MSS Design

Actionee ECS

Sub Category

Subject Document Content Incomplete and Inappropriate

Description of Problem or Suggestion:

The document content is incomplete and inappropriate.
(1) The ICD is expected to contain the detailed descriptions of internal interfaces among SDPS and CSMS elements (in this case COTS S/W packages, glue code, and custom developed units) in terms of:
- message content (data input and response output)
- message format (with specific protocol)
- message frequencies
- data rates
- data volume
- I/F performance

Almost none of this information was discernible in the document. For example, the BROWSE_SP29 Scenario (Section 4.2.1, Page 4-11) contains no specific data content and format detail for
- "information about the browse image" (first para)
- "browse command" (first para)
- command is passed to the SDSRVD in the form of a request" (second para)
- "invoke the request's Set Callback() operation to specify the callback function" (second para)

(2) There seems to be no easy way to find the details about items mentioned in the descriptions. For example in the BROWSE_SP29 Scenario (Section 4.2.1, Page 4-11) no specific references are supplied to find information about SDSRV, DsClRequest, ECS callback key mechanism, "parameter type GlBinaryP, which is a derived type of GlParameter", or "GlParameterList which is derived from a standard container class".

(3) Almost all the information presented is specific to SDPS and there is very little that is specific to CSMS. For example,
- The only MSS public classes described are EcAgEvent, EcAgManager, EcAcProxy, MsAgMonitor, MsAgSubAgent, and MsUsProfile (5 associated with Management Agent and 1 with Accountability Mgt.). There should be public classes associated

Originator's Recommendation

(1) Supply the requested information
(2) Supply specific references (down to paragraph number)
(3) Supply CSMS-specific information for interaction between SDPS and CSMS objects and between CSMS objects.
(4) Move the scenarios and scenarios related information in the ICD to the appropriate design documents or provide a rationale that justifies the inclusion in and explains the use of the above listed material in the internal ICD.

GSFC Response by:

GSFC Response Date

HAIS Response by: Gary Forman

HAIS Schedule 9/20/95

HAIS R. E. Lou Swentek

HAIS Response Date 11/21/95

Specific responses to the four recommendations follow in order:

(1) The internal interfaces in ECS are defined in terms of the public method calls listed in the document. This in turn provides the message content and message format requested. Message frequencies, data rates/volumes, and interface performance are all items that should be added to the document. In the case of COTS, where there is an internal interface that ECS will be encapsulating or wrapping the interface, the API and wrapper interfaces are/will be described in DID 305, DID 313 only describes external interfaces.

(2) The Release A SDPS/CSMS Internal ICD is not meant to be a stand-alone document. It is intended to be used in particular with the OMT Data Dictionary (DID 305, volume 18), but also more generally with the other volumes of DID 305. All of the items mentioned in the description are defined in the OMT Data Dictionary. Since the OMT Data Dictionary is automatically generated from the OMT repository, the only way to provide specific references to the paragraph level would be to manually edit the output from OMT which defeats the purpose of using the OMT tool to provide configuration managed interface definitions. MSS will review

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(3) All MSS public classes for Release A are listed in the document. The interactions of these public classes are described by the key mechanisms (in Section 6). In addition to the methods identified in the RID, EcDAAC (defined on pg. 5-107) is the only other MSS public class. EcDAAC is associated with Fault Management in DID 305. There are no MSS public classes associated with other Fault Management functions in Release A. There are also no MSS public classes associated with Performance, CM, Management Data Access, Trouble Ticketing, or Ground Events Planning in Release A. MSS will review the detail provided in the public interface classes to ensure that each class identifies specific information exchanged with other subsystems and the interaction between subsystems.

(4) Since the referenced scenarios show the interactions between CSCI from different subsystems, and thus cross the boundaries of the DID 305 subsystem design documents, the appropriate design document for including the referenced scenarios is the ICD. The inclusion of these scenarios in this document was agreed to during the CDR planning briefings with ESDIS.

Status **Closed**   **Date Closed** **11/30/95**   **Sponsor** **Folts**

****** **Attachment if any** ******